

Maintenance Template Index

Exelon Utilities Training and Reference Material (T&RM)

AM-EU-P034-R0001

Rev. 5

Effective: 3/10/2020
Supersedes: n/a
Review Type: 3 Year
Core Function: Preventive Maintenance

1. Maintenance Template Matrix

Distribution Related Maintenance Templates		Applicability					
		ED	EU	BE	CE	PE	PH
AM-XX-P034-R3001	Automatic Throw Over				X		
AM-XX-P034-R3012	Cathodic Protection Equipment, Distribution		X		X		
AM-XX-P034-R3014	Submersible Vacuum Circuit Breakers		X			X	
AM-XX-P034-R3015	Network Sectionalizing Boxes		X			X	
AM-XX-P034-R3016	Padmount Transformers		X	X	X	X	
AM-XX-P034-R3018	Distribution Vaults		X	X	X	X	
AM-XX-P034-R3019	Padmounted Operating Devices		X	X	X	X	
AM-XX-P034-R3020	Pole Top Transformers		X	X	X	X	
AM-XX-P034-R3022	Network Pilot Wire Scheme		X			X	
AM-XX-P034-R3023	Network Protector		X	X	X		
AM-XX-P034-R3026	Aerial Conductor		X	X	X	X	
AM-XX-P034-R3027	Cutouts & Disconnects		X	X	X	X	
AM-XX-P034-R3028	Aerial Gang Operated Switch		X	X	X	X	
AM-XX-P034-R3029	Wood Poles		X	X	X	X	
AM-XX-P034-R3030	Cable Equipment		X	X		X	
AM-XX-P034-R3031	Capacitors		X	X	X	X	
AM-XX-P034-R3032	Distribution Regulators		X	X	X	X	
AM-XX-P034-R3033	Distribution Manholes		X	X	X	X	
AM-XX-P034-R3034	Submersible Transformers		X	X	X	X	
AM-XX-P034-R3035	Reclosers and Sectionalizers		X	X	X	X	
AM-XX-P034-R3036	Submersible Switches		X	X	X	X	
AM-XX-P034-R3037	DC In A Box		X		X		

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Protection System Related Maintenance Templates

		Applicability					
		ED	EU	BE	CE	PE	PH
AM-XX-P034-R0003	Underfrequency Load Shed & Undervoltage Load Shed		X	X	X	X	
AM-XX-P034-R1028	Meters, Panel (Volt-Amp-Watt-Var)		X	X	X	X	
AM-XX-P034-R1030	Alarm Annunciator Systems		X	X	X	X	
AM-XX-P034-R1031	Protection System Equipment Transmission		X	X	X	X	
AM-XX-P034-R1032	Protection System Equipment Distribution		X	X	X	X	
AM-XX-P034-R1038	Fault Recorders		X	X	X	X	
AM-XX-P034-R1042	Standalone Substation Automation Schemes		X		X		
AM-XX-P034-R1048	On Line Monitoring System - Transformers		X	X	X	X	
AM-XX-P034-R1049	Voltage Control Relay		X	X	X	X	
AM-XX-P034-R1074	STATION DC SUPPLY, includes station batteries and battery chargers		X	X	X	X	
AM-XX-P034-R1075	Cyber Systems		X	X	X	X	
AM-XX-P034-R1075	34kV and below Battery Energy Storage Systems (BESS)				X		

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Substation Related Maintenance Templates

		Applicability					
		ED	EU	BE	CE	PE	PH
AM-XX-P034-R1001	Circuit Breaker, Vacuum 4-34 kV		X	X	X	X	
AM-XX-P034-R1002	Circuit Breaker, Air Magnetic, 4-12 kV		X	X	X	X	
AM-XX-P034-R1003	Circuit Breaker, Oil, 4-13 kV		X	X	X	X	
AM-XX-P034-R1004	Substation Capacitor Bank		X	X	X	X	
AM-XX-P034-R1005	Substation Recloser		X		X		
AM-XX-P034-R1006	Circuit Breaker, Oil, 34 kV and Above		X	X	X	X	
AM-XX-P034-R1007	Distribution Bifurcating Cabinets		X		X		
AM-XX-P034-R1008	Circuit Breakers, Air Blast 66 kV and Above		X	X			
AM-XX-P034-R1009	Circuit Breaker Single Pressure Puffer ≥34 kV		X	X	X	X	
AM-XX-P034-R1010	Fixed Water Spray System		X	X		X	
AM-XX-P034-R1011	Fire Protection Buildings and Yards		X	X	X	X	
AM-XX-P034-R1012	Substation Building		X	X	X	X	
AM-XX-P034-R1013	Substation Yards		X	X	X	X	
AM-XX-P034-R1014	Sump Systems		X	X	X	X	
AM-XX-P034-R1015	Structures and Lightning Masts		X	X	X	X	
AM-XX-P034-R1016	Substation Foundations		X	X	X	X	
AM-XX-P034-R1017	Substation Bus - Open Air		X	X	X	X	
AM-XX-P034-R1018	Circuit Breaker 2 Pressure SF6		X	X		X	
AM-XX-P034-R1019	Power Transformer		X	X	X	X	
AM-XX-P034-R1020	Inductors		X	X	X	X	
AM-XX-P034-R1021	Light and Power Transformers, Panel, ATO		X	X	X	X	
AM-XX-P034-R1022	Voltage Regulator		X		X	X	
AM-XX-P034-R1023	Switch (Substation)		X	X	X	X	
AM-XX-P034-R1024	Circuit Switcher		X	X	X	X	
AM-XX-P034-R1025	Substation Grounding Systems		X	X	X	X	
AM-XX-P034-R1027	Control Cable Junction Boxes		X	X	X	X	
AM-XX-P034-R1043	Surge Arrester - Free Standing		X	X	X	X	
AM-XX-P034-R1044	Instrument Transformers – Free Standing Potential Transformers		X	X	X	X	
AM-XX-P034-R1045	Instrument Transformers – Coupling Capacitor Voltage Transformers (CCVT)		X	X	X	X	
AM-XX-P034-R1046	Instrument Transformers – Free Standing Current Transformers		X	X	X	X	
AM-XX-P034-R1047	Meters, Revenue Class		X	X	X	X	
AM-XX-P034-R1050	Portable Transformer		X	X	X	X	
AM-XX-P034-R1051	Instrument Transformers - Combination Current / Potential		X		X		
AM-XX-P034-R1052	Circuit Breaker, H-type Oil – H2O 13 kV		X			X	

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		ED	EU	BE	CE	PE	PH
AM-XX-P034-R1055	Circuit Breaker, Air Blast 13 kV		X			X	
AM-XX-P034-R1056	Generators - Substation Auxiliary Power		X	X	X	X	
AM-XX-P034-R1061	Switch, Unit Cage Load-Break And Cage Assembly		X			X	
AM-XX-P034-R1062	Gas Insulated Switchgear (GIS)		X				

Transmission Related Maintenance Templates

		Applicability					
		ED	EU	BE	CE	PE	PH
AM-XX-P034-R2001	Overhead Transmission, Structures		X	X	X	X	X
AM-XX-P034-R2002	Overhead Transmission, Foundations		X	X	X	X	X
AM-XX-P034-R2003	Overhead Transmission, Line Switches		X	X	X	X	X
AM-XX-P034-R2004	Overhead Transmission, Conductors		X	X	X	X	X
AM-XX-P034-R2005	Overhead Transmission, Insulators		X	X	X	X	X
AM-XX-P034-R2006	Line Low Pressure Fluid Filled (LPFF) Cable System		X	X	X	X	X
AM-XX-P034-R2007	Line High Pressure Fluid Filled (HPFF) Cable System		X	X	X	X	X
AM-XX-P034-R2008	Line Solid Type Cable System (XLPE)		X	X	X	X	X
AM-XX-P034-R2009	Cathodic Protection Equipment Underground Transmission		X	X	X	X	X

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2. Development history

Revision 0		Date: 6/17/2005
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	To provide a consolidated index of issued PCM Templates	

Revision 1		Date: 6/30/2005
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add documents posted to the Management Model on 6/30/05	

Revision 2		Date: 7/22/2005
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add documents posted to the Management Model in July, 2005	

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Revision 3		Date: 4/28/2006
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add AM-ED-P1056 to the list of Substation Related Templates	

Revision 4		Date: 11/6/2006
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add reference for applicability to EED, ComEd, PECO	

Revision 5		Date: 11/13/2006
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add additional references for applicability to EED, ComEd, PECO	

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Revision 6		Date: 11/17/2006
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add additional references for applicability to EED, ComEd, PECO	

Revision 7		Date: 12/22/2006
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add additional references for applicability to EED, ComEd, PECO	

Revision 8		Date: 12/29/2006
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add additional references for applicability to EED, ComEd, PECO	

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Revision 9		Date: 1/12/2007
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add additional references for applicability to EED, ComEd, PECO	

Revision 10		Date: 1/26/2007
Writer	Kathy McHugh (Strategic Programs)	
Reviewer(s)		
UFAM Approver(s)	Kathy McHugh, FAM Maintenance Planning	
Reason written	Revised to add additional references for applicability to EED, ComEd, PECO	

Revision 11		Date: 7/31/2009
Writer	Frank Gabrieli (T&S Maintenance)	
Reviewer(s)		
UFAM Approver(s)	Jean Holderried, FAM	
Reason written	PRC-005 - Transmission and Generation Protection System Maintenance and Testing- PCM Template Index version issue should be corrected (procedure has page 1 has Rev 10 page 2 has Rev. 7.same issue found during 2007 RFC audit of PECO). AR 106670 – 15. Additionally added templates that are on the management model but not in the index.	

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Revision 12		Date: 8/1/2009
Writer	Drew Davis (T&S Engineering)	
Reviewer(s)	Drew Reindel (T&S Engineering)	
UFAM Approver(s)	Jean Holderried (PECO FAM), Ron Donovan (ComEd FAM), Bill Forst (ComEd FAM)	
Reason written	<p>Modified the following templates to demonstrate "Evidence of Regulatory Compliance" as applicable to PECO:</p> <p>Deleted AM-ED-P034-R0003 and created AM-CE-P034-R0003 and AM-PE-P034-R0003.</p> <p>Deleted AM-ED-P034-R0004 and created AM-CE-P034-R0004 (Com Ed only).</p> <p>Deleted AM-ED-P034-R1031, R1035 and R1040, combined these three (3) templates into one for each company AM-CE-P034-R1031 and AM-PE-P034-R1031.</p> <p>Deleted AM-ED-P034-R1037 (SPS) and created AM-CE-P034-R1037, SPS was included in PECO AM-PE-P034-R1031.</p> <p>Deleted AM-ED-P034-R1038 and created AM-CE-P034-R1038 and AM-PE-P034-R1038.</p>	

Revision 13		Date: 12/23/2009
Writer	Drew Davis (T&S Engineering)	
Reviewer(s)	Rich Webster (T&S Engineering), Vince Catania (T&S), Rob Crognale(T&S Engineering), John Blazekovich (TSC)	
UFAM Approver(s)	Bill Sullivan (PECO FAM)	
Reason written	Deleted AM-PE-P034-R1033 and modified the title of AM-PE-P034-R1031.	

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Revision 14		Date: 4/26/2010
Writer	Drew Reindel (T&S Engineering)	
Reviewer(s)	Drew Davis (T&S Engineering), Bernie Dwyer (T&S Engineering)	
UFAM Approver(s)	Bill Sullivan (PECO FAM)	
Reason written	Added AM-PE-P034-R1061 for Unit Cage Switch Maintenance.	

Revision 15		Date: 11/30/2010
Writer	Chris Stefanski (Material Condition)	
Reviewer(s)	Ken Wendt (Material Condition), John Blazekovich (TSC), Drew Davis, Drew Reindel (PECO)	
UFAM Approver(s)	Bill Fluhler, Nitin Patel, Bill Gannon, Jim Crane (ComEd FAMs), Bill Sullivan (PECO FAM)	
Reason written	Deleted AM-ED-P034-R1039, AM-CE-P034-R0003, AM-CE-P034-R0004, AM-CE-P034-R1031, AM-CE-P034-R1033, AM-CE-P034-R1037, AM-CE-P034-R1033. Added AM-CE-P137-R0001.	

Revision 16		Date: 5/6/2011
Writer	Drew Reindel (T&S Engineering)	
Reviewer(s)	Drew Davis (T&S Engineering), George Leinhauser (T&S Engineering)	
UFAM Approver(s)	Bill Sullivan (PECO FAM)	
Reason written	Deleted AM-PE-P034-R1026 – “34 kV Medium Voltage Static Transfer Switch” due to the retirement of the template following the sale of Zach Substation. Change affects PECO only.	

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Revision 17		Date: 5/14/2011
Writer	Jason Connell (T&S Engineering)	
Reviewer(s)	Drew Reindel (T&S Engineering), Tim Shannon (T&S Engineering)	
UFAM Approver(s)	Drew Davis (PECO FAM)	
Reason written	Changed title of AM-PE-P034-R1038 from "Fault Recorders" to "Disturbance Monitoring Equipment." Change affects PECO only.	

Revision 18		Date: 5/23/2011
Writer	Jason Connell (T&S Engineering)	
Reviewer(s)	Drew Reindel (T&S Engineering), Tim Shannon (T&S Engineering)	
UFAM Approver(s)	Drew Davis (PECO FAM)	
Reason written	Removed AM-ED-P034-R1029 – "Fuses, Relay Protection Secondary and Control.	

Revision 19		Date: 5/22/2013
Writer	Chris Stefanski (Material Condition)	
Reviewer(s)	Drew Reindel (PECO), George Leinhauser (PECO), Ken Wendt (ComEd), Terry Whalen (ComEd), Nicole Love (ComEd)	
UFAM Approver(s)	Bill Fluhler (UFAM ComEd) , J. Coffman (UFAM PECO)	
Reason written	Removed documents (AM-ED-P034-R1036, -R1041, AM-PE-P034-R1026, AM-CE-P034-R2003); added documents (AM-CE-P034-R1071, -R1072, AM-PE-P034-R1070, -R1073); revised titles as appropriate to match posted documents	

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Revision EU 0		Date: 5/22/2015
Writer	Chris Stefanski (Exelon Utilities)	
Reviewer(s)	Rick Clarke (BGE), George Leinhauser (PECO), Ken Wendt (ComEd), Mike Keller (PECO)	
UFAM Approver(s)	Cory Summerson (UFAM BGE), Mike Moy (UFAM ComEd) , J. Coffman (UFAM PECO)	
Reason written	Reconfigured document list into matrix format to support creation of EU and OpCo specific templates. Changed document number from ED to EU applicability and changed review type from NERC to 3-year.	

Revision EU 1		Date: 6/10/2016
Writer	Kevin Swiat (Exelon Utilities)	
Reviewer(s)	Hugo Castaneda (ComEd), Frank Frantzas (ComEd), Jacob Burlin (BGE), Bob Munley (BGE), Mike Keller (PECO)	
UFAM Approver(s)	Cory Summerson (UFAM BGE), Mike Moy (UFAM ComEd) , J. Coffman (UFAM PECO)	
Reason written	General updates to reflect changes from Maintenance Template Alignment initiative.	

Revision EU 2		Date: 7/1/2016
Writer	Suneetha Parupalli (ComEd)	
Reviewer(s)	Kevin Swiat (ComEd), Pete Yan (ComEd)	
UFAM Approver(s)	Cory Summerson (UFAM BGE), Mike Moy (UFAM ComEd) , J. Coffman (UFAM PECO)	
Reason written	Removed document AM-XX-P034-R3008 as ComEd no longer has this equipment on the system.	

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Revision EU 3		Date: 10/31/2016
Writer	Kevin Swiat (ComEd)	
Reviewer(s)	Dale Player (ComEd)	
UFAM Approver(s)	Rick Knotts (UFAM BGE), Michael Moy (UFAM ComEd) , Rich Cornforth (UFAM PECO), Carl Kapes (UFAM PHI)	
Reason written	Added AM-XX-P034-R1075 in Protection System Related Maintenance Templates section for Cyber Systems.	

Revision EU 4		Date: 9/24/2019
Writer	Nevin Schlabach, T&S Equipment Engineering (PHI)	
Reviewer(s)	Dale Player (ComEd)	
UFAM Approver(s)	Mike Moy (UFAM ComEd), Carl Kapes (UFAM PHI), Rick Knotts (UFAM, BGE), Richard Cornforth (UFAM PECO)	
Reason written	Added AM-BE-P034-R0001 BGE Substation Criticality Definitions, removed AM-CE-P034-R1008.	

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Revision EU 5		Date: 3/10/2020
Writer	Kevin Swiat, Material Condition (ComEd)	
Reviewer(s)	Suneetha Parupalli (ComEd)	
UFAM Approver(s)	Michael Moy (UFAM ComEd), Carl Kapes (UFAM PHI), Rick Knotts (UFAM BGE), Richard Cornforth (UFAM PECO)	
Reason written	Added AM-CE-P034-R1076 for 34kV and below Battery Energy Storage Systems (BESS); Added AM-EU-P034-R1062 for Gas Insulated Switchgear.	